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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/045,251 | 01/10/2002 | Franc Edward Noel JR. | Y09-01-0021 | 2342 |

7590 06/24/2003

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[REDACTED] EXAMINER

HURLEY, SHAUN R

| ART UNIT | PAPER NUMBER |
|------------|--------------|
| [REDACTED] | 3765 |

DATE MAILED: 06/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Pw

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/045,251 | NOEL ET AL. | |
| | Examiner | Art Unit | |
| | Shaun R Hurley | 3765 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 January 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-7 and 11-13 is/are rejected.

7) Claim(s) 8-10 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 10 January 2002 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Drawings

1. Figure 2 is objected to because point 50 is described as the point of decreasing tpi, yet it is located at a point on the curve at which tpi is still increasing. If 50 is the point of decreasing tpi, Applicant should have it point to the uppermost point of the curve. Further, on axis 36, the term "TURNS" should read --TWISTS-- so as to agree with the specification.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

Page 3, lines 4-7 read poorly. It seems to be an incomplete sentence which may be correctable by changing "operating" to read --operate--.

Page 7, line 26, "90, 92" should read --92, 94--

Page 8, line 26, "24" should read --32--

"68" is called a "cable" on page 10, lines 18, 26, 31, then called a "point" on page 12, line 16. Which is it?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3765

4. Claims 1-6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 1, it is unclear what applicant is attempting to claim. How can the twist stop device be mounted adjacent to the twisting location when they have been disclosed as being one in the same? Is this an additional twist stop? Are the figures incorrect?

In regards to claim 2, it is unclear whether applicant is attempting additional components of the apparatus, or further explaining the components of claim 1. If Applicant is disclosing additional components, there is no disclosure of such. If Applicant is attempting to further explain the components of claim 1, he should rewrite claim 2 along the lines of “wherein the device for rotating...is a rotating frame...” for all of the components.

In regards to claim 12, Examiner has no idea what the structure of such a twisted pair cable possesses. Claim 1 teaches a twisted pair cable, yet claim 12 speaks of side-by-side twisted pair cables. How can a twisted pair cable claim become side-by-side twisted pair cables? What is the structure?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 6, and 7, to the degree definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Campbell et al (5263309).

Campbell teaches an apparatus for forming a twisted pair cable (Figure 1) comprising a device for rotating a pair of elongated strands at a first predetermined rate about a twisting location (20), a twist stop (34), and a strand puller operating at a second predetermined rate (38), as well as an inherent method of using such a device.

7. Claims 11-13, to the degree definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Cook (3025656).

Cook teaches a twisted pair cable comprising first and second conductors twisted about one another over a plurality of unequal adjacent lengthwise segments and differing twist rates (Figure 14).

8. Claims 11-13, to the degree definite, are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese Patent (06349344)

The Japanese Patent teaches a twisted pair cable comprising first and second conductors twisted about one another over a plurality of unequal adjacent lengthwise segments and differing twist rates (Abstract and Figures 1-5).

9. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Barton (6378283).

Barton teaches an apparatus for forming a twisted pair cable (Figure 1) comprising a device for rotating a pair of elongated strands at a first controlled predetermined rate about a twisting location (2a), a twist stop (146), and a strand puller operating at a second controlled predetermined rate (160).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al.

Campbell essentially teaches the invention as discussed above, but fails to specifically teach controlled predetermined rates. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize controlled predetermined rates in the device of Campbell, so as to produce a useful product. Campbell teaches an apparatus for making a cable, and while he does not specifically discuss controlled predetermined rates, he obviously would utilize such so as to have control over the production of his cable. Otherwise, his rates of production would vary to the point that his product would be useless to industry.

Allowable Subject Matter

12. Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 2 and 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haselwander (5706642) and Henning (3052079) both teach what is well known in the twisted strand art.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R Hurley whose telephone number is (703) 605-1236. The examiner can normally be reached on Mon - Fri, 7:00am - 4:00pm, off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J Calvert can be reached on (703) 305-1025. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-085.

SRH
June 17, 2003


JOHN J. CALVERT
SUPPLY PATENT EXAMINER
TECHNOLOGY CENTER 3700